

WHAT IS CLAIMED IS:

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1. A mobile phone powered by a battery having a communication function and an additional function, the mobile phone comprising:

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means for determining whether a level of a battery capacity is lower than a threshold level for permitting operation of the additional function;

means for detecting a signal indicating operation of the additional function; and

means for informing a user of restriction of the additional function when the battery capacity is lower than the threshold level and the signal indicating operation of the additional function exists.

2. The mobile phone as in claim 1, wherein:

the informing means includes means for inquiring user's intention whether to continue the operation of the additional function after the battery capacity becomes lower than the threshold level.

3. A mobile phone powered by a battery having a communication function and a function for producing music sounds, the mobile phone comprising:

means for determining whether a level of a battery capacity is lower than a threshold level for permitting operation of the music sounds producing function; and

means for terminating operation of the music sounds producing function and for informing a user of that effect when the battery capacity becomes lower than the threshold level during a period in which the music sounds generating function is being operated.

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4. A mobile phone powered by a battery having a communication function and an additional function, the mobile phone comprising:

first means for determining whether a battery capacity is lower than a first level;

first means for restricting operation of the additional function when the battery capacity is lower than the first level;

second means for determining whether the battery capacity is lower than a second level which is lower than the first level; and

second means for restricting operation of the communication function when the battery capacity is lower than the second level.

5. The mobile phone as in claim 4, further including means for informing a user of restriction of the additional function when the battery capacity is lower than the first level.

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6. The mobile phone as in claim 5, wherein:

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Concl- the additional function is a function for producing music sounds.

7. The mobile phone as in claim 6, wherein:

the informing means informs the user of the restriction of the function for producing music sounds as warning sounds superposed on the music sounds.

8. The mobile phone as in claim 4, further including means for detecting whether the additional function is being operated, wherein:

the first restricting means terminates the operation of the additional function when the additional function is being operated.

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9. The mobile phone as in claim 5, further including means for detecting whether the additional function is being operated, wherein:

the informing means includes a visual display panel for displaying the restriction of the additional function thereon; and

the restriction is displayed on the display panel as a sign to prohibit the operation of the additional function when the additional function is not being operated.

10. The mobile phone as in claim 9, further including means for selecting either to follow or not to follow the prohibiting sign displayed.

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11. The mobile phone as in claim 4, further comprising:

third means for determining, after the first restricting means restricted the additional function, whether the battery capacity is higher than a third level which is higher than the first level; and

means for canceling the restriction of the additional function when the battery capacity is higher than the third level.

12. The mobile phone as in claim 4, wherein:
the first determining means and the second determining means determine the battery capacity based on a terminal voltage of the battery.

13. The mobile phone as in claim 11, wherein:
all of the first, second and third determining means determine the battery capacity based on a terminal voltage of the battery.

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14. A mobile phone powered by a battery having a communication function and at least one additional function, the mobile phone comprising:

first means for determining whether a battery capacity is lower than a first level;

means for informing to a user that the battery capacity is lower than the first level when such is determined by the first determining means;

second means for determining whether the battery capacity is lower than a second level which is lower than the first level; and

means for restricting operation of the communication function when the battery capacity is determined to be lower than the second level by the second determining means.

15. The mobile phone as in claim 14, further comprising:

means for restricting operation of only the additional function when the battery capacity is determined to be lower than the first level by the first determining means.

16. The mobile phone as in claim 14, wherein:

the informing means further informs to the user that operation of only the additional function is restricted when the battery capacity is determined to be lower than the first level by the first determining means.